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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/435,668	11/08/1999	KEITH WAYNE GOOSSEN	GOOSSEN-80	5527
26291	7590	12/30/2004	EXAMINER	
MOSER, PATTERSON & SHERIDAN L.L.P. 595 SHREWSBURY AVE, STE 100 FIRST FLOOR SHREWSBURY, NJ 07702			JACKSON, CORNELIUS H	
			ART UNIT	PAPER NUMBER
			2828	

DATE MAILED: 12/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/435,668

Applicant(s)

GOOSSEN, KEITH WAYNE

Examiner

Cornelius H. Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-12 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-4 and 6-12 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Acknowledgement

1. Acknowledgment is made that applicant's Amendment, filed on 27 October 2004, has been entered. Upon entrance of the Amendment, claims 1, 6 and 8 were amended. Claims 1-4 and 6-12 are now pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 and 6-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Park (5524092). Park discloses a metal capped mirror **Fig. 2**, comprising a stack of dielectric layers **12 and 13** of alternating high and low indices of refraction capped with a layer of metal **11**, the improvement comprising a layer **12** consisting of tin oxide to which the metal capping layer **11** is directly adhered for improving adhesion of the metal capping layer to the stack of dielectric layers. The limitation, "for improving adhesion of the metal capping layer to the stack of dielectric layers", has not been given any patentable weight because the manner in which a claimed apparatus is intended to be

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employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.

Regarding claim 2, Park discloses at the end of the stack comprising an integral number of pairs of dielectric layers, **see Figs. 1 and 2.**

Regarding claim 3, Park discloses all of the stack layers other than the end layer of tin oxide are materials other than tin oxide, **see col. 5, lines 5-21.**

Regarding claim 4, Park discloses the tin oxide layer is one of a pair of dielectric layers disposed at the stack end, **see Fig. 1.**

Regarding claims 6-8, Park discloses all the stated limitations.

Regarding claims 9-10, Park discloses the metal is of gold, **see col. 4, lines 14-19 and col. 4, lines 54-59.**

Regarding claims 11-12, Park discloses all the stated limitations, **see Figs. 1 and 2.**

4. Claims 1-4, 7, 8, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Tokito et al. (5780174). Tokito et al. disclose a metal capped mirror **Fig. 1**, comprising a stack of dielectric layers **12** of alternating high and low indices of refraction capped with a layer of metal **22**, the improvement comprising a layer **14** consisting of tin oxide to which the metal capping layer **22** is directly adhered for improving adhesion of the metal capping layer to the stack of dielectric layers. The limitation, "for improving adhesion of the metal capping layer to the stack of dielectric layers", has not been given any patentable weight because the manner in which a

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claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.

Regarding claim 2, Tokito et al. disclose at the end of the stack comprising an integral number of pairs of dielectric layers, **see Fig. 12**.

Regarding claim 3, Tokito et al. disclose all of the stack layers other than the end layer of tin oxide are materials other than tin oxide, **see col. 5, line 50-col. 6, line 13**.

Regarding claim 4, Tokito et al. disclose the tin oxide layer is one of a pair of dielectric layers disposed at the stack end, **see Fig. 12**.

Regarding claims 7-8, Tokito et al. disclose all the stated limitations, **see Figs. 1 and 12 and col. 5, line 50-col. 6, line 13**.

Regarding claims 11-12, Tokito et al. disclose all the stated limitations, **see Fig. 1**.

Response to Arguments

5. Applicant's arguments filed 27 October 2004 have been fully considered but they are not persuasive.

Applicant argued the following:

- a. Park does not disclose a mirror having a stack of dielectric materials of alternating high and low indices of refraction.
- b. There is no absolutely no teaching, suggestion or disclosure in Park or Tokito that Indium tin oxide performs the function of tin oxide as taught by the Applicant. As

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such, the indium tin oxide taught in Park can not be equated to the claimed layer of tin oxide or the function of the claimed layer of tin oxide.

c. Tokito fails to disclose a layer of tin oxide in directly adhered to the metal layer.

In response to Applicant's arguments:

a. Although the alternation of refractive indices of layers 13 and 14 (in Figure 2) is not serial or more than once, it is inherent that the indices of refraction alternates between the two layers from high to low.

b. It has been held that the fact that the references relied on by the PTO fail to evince an appreciation of the problem identified and solved by applicant is not, standing alone, conclusive evidence of the nonobviousness of the claimed subject matter. The references may suggest doing what the applicant has done even though workers in the art were ignorant of the existence of the problem. *In re Gershon*, 152, USPQ 602 (CCPA 1967). Park uses indium tin oxide as an example of a common oxide used, so that one skill in the art at the time the invention was made would know the type of material that maybe used, **see Bandettini et al. (5959762), col. 7, lines 42-44.**

c. Tokito discloses a layer of tin oxide in directly adhered to the metal layer, through the transparent conductive layer.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cornelius H. Jackson whose telephone number is (571)272-1942. The examiner can normally be reached on 8:00 - 5:00, Monday - Friday.

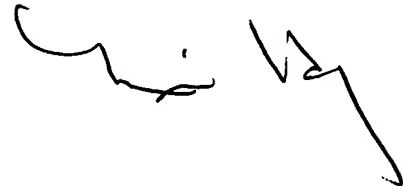
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MinSun Harvey can be reached on (571)272-1835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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